Dufour 425

Valiant 40

Illustrations by Regina Sheptcock

PS DESIGN GUIDE KEEL AREA/SAIL AREA MODERN

BOAT	DRAFT	KA/SA	LEAD	DESIGN
CATALINA 375 (shoal)	4′ 8″	3.5	3.1%	Jerry Douglas
CATALINA 375	6′ 10″	4.7	5.1%	Jerry Douglas
DUFOUR 425	6′ 10″	3.3	6.8%	Felci/Roseo
ELAN IMPRESSION 385 (shoal)	4′ 11″	3.1	3.6%	Rob Humphreys
ELAN IMPRESSION 385	5′ 11″	3.8	4.2%	Rob Humphreys
HANSE 430 (shoal)	5′ 11″	2.1	0.2%	Judel/Vrolijk
HANSE 430	7′ 3″	2.6	0.4%	Judel/Vrolijk
HUNTER 36 (shoal)	4′ 11″	2.6	5.0%	Hunter Design Group
HUNTER 36	6′ 5″	3.8	4.4%	Hunter Design Group
MALO 37	5′ 10″	3.5	8.1%	Leif Ängarmark
TARTAN 4300 (shoal)	5′ 10″	2.9	5.8%	Tim Jackett
TARTAN 4300	8′ 3″	3.5	4.8%	Tim Jackett
BENETEAU 40	6′ 3″	3.5	5.3%	Berret/Racoupeau

PS DESIGN GUIDE KEEL AREA/SAIL AREA CLASSICS

MODERN BOAT	DRAFT	KA/SA	LEAD	DESIGN
VALIANT 40	6′	4.6	5.7%	Robert Perry
MORGAN 383	5′	4	13.1%	Ted Brewer & Morgan Design
BALTIC 39	6′ 11″	3.7	7.1%	C&C Design
ENDEAVOUR 35	4′ 9″	3.6	9.7%	Bruce Kelley
PETERSON 44	6′ 8″	5.5	12.7%	Doug Peterson
PEARSON 386	5′ 6″	4.5	10.6%	Bill Shaw
TARTAN 37 (centerboard up)	4′ 2″	3.7	12.4%	Sparkman & Stephens
TARTAN 37	6′ 7″	4.1	10.8%	Sparkman & Stephens

In the tables above, the classic boats have higher keel/sail-area ratios and higher values for lead (the fore-and-aft distance between the center of effort and the center of lateral resistance). The one exception is the Valiant 40, which has a large skeg supporting the rudder and adding area well aft. The classic Baltic 39, which was a fairly extreme racer/cruiser for its day, comes closest to the values found in the modern fleet.